November, 9 2015

Mobile

www.okmap.org

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Introduction

References

OkMap web site	http://www.okmap.org
OkMap forum	http://www.okmap.org/forum
OkMap Mobile	https://itunes.apple.com/us/app/mountains-ar/id949554920
OkMap Mobile Lite	https://itunes.apple.com/us/app/okmap-mobile-lite-free-offroad/id975033367
This manual	http://www.okmap.org/download/okmapMobile_en.pdf
OkMap Desktop	http://www.okmap.org/en_okmapdesktop.asp

Other products for iOS

Mountains AR	The augmented reality to discover mountains, peaks and summits https://itunes.apple.com/en/app/mountains-ar/id884969067
Touristic Italy	The augmented reality to discover monuments, attractions and services https://itunes.apple.com/en/app/touristic-italy-augmented/id896425768

Full version and lite version

Thank you for purchasing OkMap Mobile or for installing the corresponding free version OkMap Mobile Lite.
In Lite version the following features aren't available:

- Managing of *custom maps* in KMZ format
- Adding of TMS/WMS custom maps
- Recording of tracks and sending the position to a remote server
- Managing of STRM altimetric data
- Managing of Cloud

Custom maps (KMZ)

The *custom maps* in KMZ format differ from those online, provided by servers from various manufacturers (Apple, Google, Microsoft, Nokia, etc ...), because:

- They are offline, so always available even without a connection.
- They are raster, so can represent the morphology of the territory in a much more attractive way than any other vector map.
- They are thematic, so meet the specific needs of many categories of users using the app during their outdoor activities (search and rescue, hiking, biking, off-road, sailing, flying, fishing and hunting, search mushrooms, geocaching, soft air and many others).
- Are easily producible, even from a paper map, using the free software OkMap Desktop.

STRM elevation data

The STRM elevation data (Shuttle Radar Topographic Mission) let you know the altitude of any point of the globe recognized by the mission (from 56 ° South to 60 ° North). The set of data defines the Digital Elevation Model (DEM).

The resolution in the US is one second of arc (about 30m) while in the rest of the world is three seconds of arc (about 90m).
The data is organized in files, each relating to one degree of latitude and one degree of longitude and are freely downloadable from the internet.

OkMap downloads on demand the files relating to any point on the map, creating a local archive of elevation data of the favorite places.
Thus OkMap is able to show the altitudes of the points on the map in the status bar with the coordinates togheter and uses these altitudes to create waypoints and tracks, allowing to create the elevation profile of a track in the planning stage also.
Knowing the altitudes, OkMap can calculate the estimated travel time of the designed tracks.
The elevation data can be interpolated to obtain more accurate values.

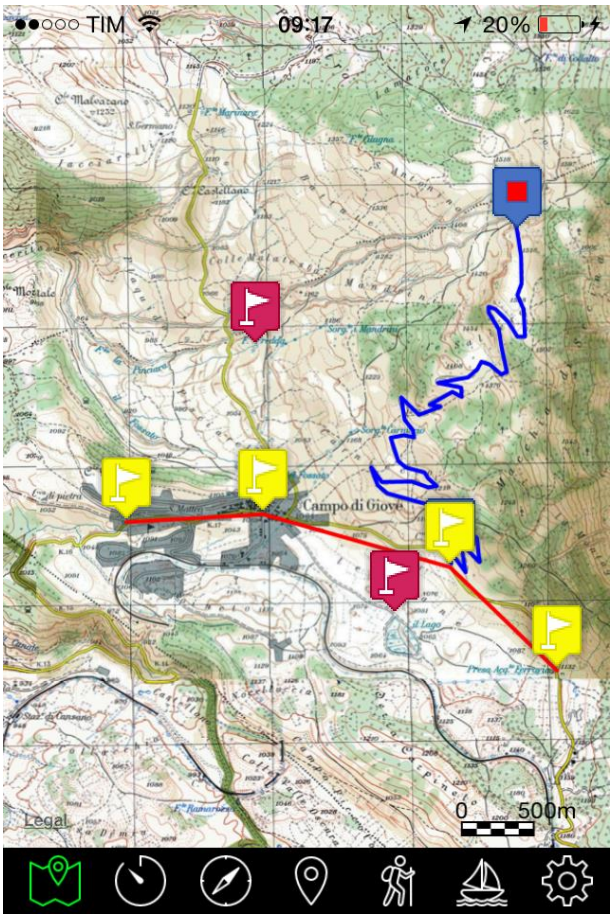
Requirements

To get the full functionality of the software you must activate:

- **Settings – Privacy – Location Services** => On
  Enable the use of geolocation. Disabling this option, the GPS cannot be turned on.
  Check that this feature is also enabled in OkMap application, in the app list below.

- **Settings – General – Background App Refresh** => On
  Enable track logging even when the app is in the background.
  Check that this feature is also enabled in OkMap application, in the app list below.

Screen organization



The OkMap Mobile app is designed to be installed on both iPhone and iPad devices.

In addition, the app can work in either *portrait* (vertical device) and *landscape* mode (horizontal device).

The choice of the device orientation, horizontally or vertically, is essentially personal and depends on your habits and on the type of information you are viewing; the positions of the elements of the page are automatically adjusted, based on the orientation of the device, for readability.

Below there is a toolbar with icons corresponding to the main pages of the app. This toolbar is hidden when you are viewing secondary pages.

When you are viewing a page, the icon is colored green instead of white.

The main pages are:

Map

Waypoints

Settings

Trip computer

Tracks

Compass

Routes

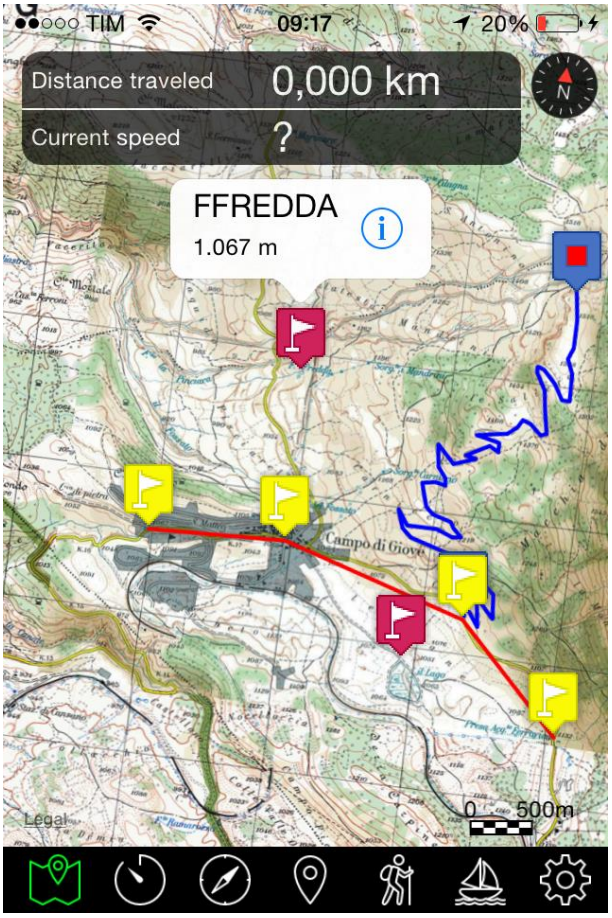
Map

Page organization

The page contains the following elements:

- Background containing the chosen vector map (the section *Choosing the map* explains how to change the map).
- Overlay drawing of *Custom maps (KMZ)* (not present in the Lite version).
- Overlay drawing of *GPX data* (waypoints, tracks and routes).
- Box on the top containing the navigation indicators (to find all available indicators see the *Trip computer* page).
- Orientation of the map on the top right (appears only if the map is not oriented to the north).
- The *scale bar* on the bottom right represented by a segment that corresponds to a linear measure unit.

Custom maps (KMZ)



Custom maps, which we discussed briefly in the *Introduction*, are contained in files with extensions .kmz.

OkMap Mobile manages one or more KMZ files simultaneously.

KMZ files can be easily installed on your iOS device using the procedure described in the appendix *Transferring files between a PC and the device*.

KMZ custom maps are drawn as overlays on the chosen vectorial map.

If the map was produced with images in PNG format, transparency is handled.

Overlapping custom map images are drawn in the order defined in the KMZ file.

Remember that the custom maps can only be used in the full paid version of OkMap Mobile.

GPX data

GPX data are contained in files with .gpx extension.

OkMap Mobile manages one or more GPX files simultaneously.

GPX files can be easily installed on your iOS device using the procedure described in appendix *Transferring files between a PC and the device*.

GPX data are drawn as overlays on the map according to their type:

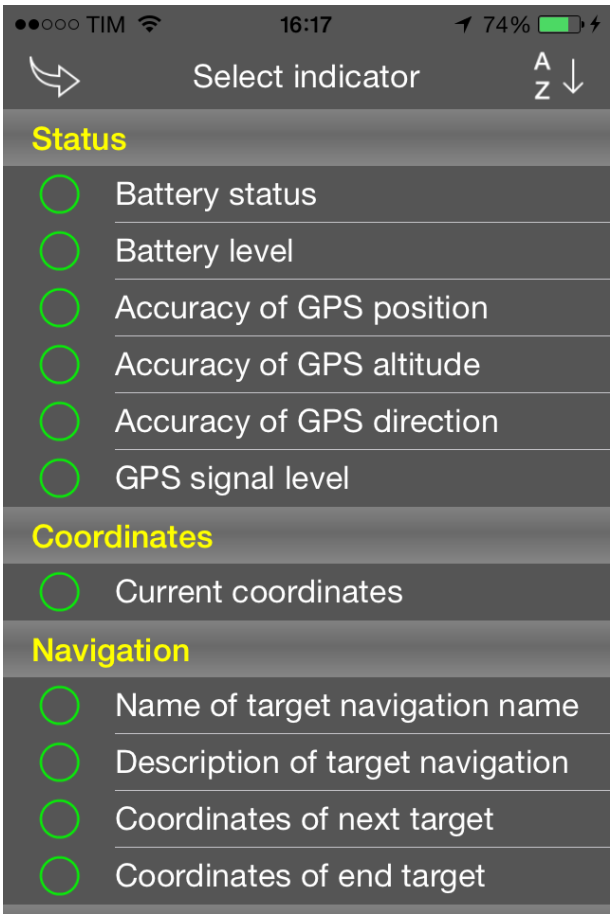
- **Waypoints** are drawn with the icon .
- **Tracks** are drawn with blue lines; the beginning and end of the track are drawn with the icons .
- **Routes** are drawn with red lines; route waypoints are drawn with the icon .

The colors of the track and route lines can be customized in the *Settings* page.

Tapping a waypoint icon makes a balloon appear with the waypoint's name and the corresponding altitude. Pressing the icon opens the *Waypoint form* page.

Similarly, tapping on the start or end track icons makes a balloon with the track name appear, indicating if it is the start or the end of the track and showing the track length. Pressing the icon opens the *Track form* page.

Navigation indicators



Each navigation indicator, contained in the panel at the top, can be customized, choosing the most suitable to the needs of the moment, by tapping on it.

The page shown here to the left appears; it contains the list of all the navigation indicators available.

The indicator marked with a green solid dot is that selected at the time. To choose a different one it is enough to tap on the appropriate line.

The list of indicators can be sorted by tapping on the icon ; possible sorts are by:

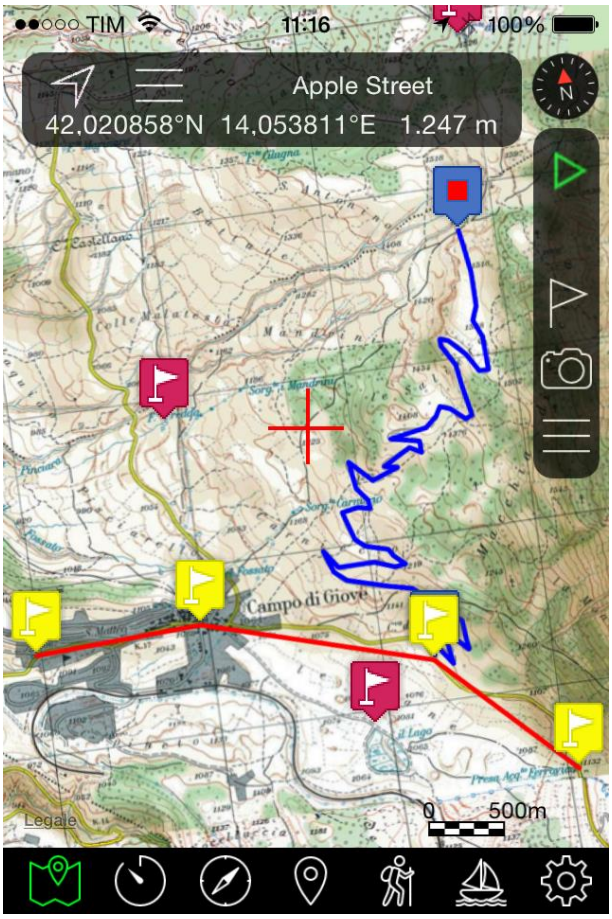
- Unit of measure.
- Type.

The yellow grouping sections change accordingly.

To cancel the selection of a new indicator tap on the icon .

The presence of the box navigation indicators and their number can be customized in the *Settings* page.

Toolbars



Tapping on the green icon of the map below (or tapping for a split second on the map itself) you get the display of toolbars. Repeating the operation returns to the previous mode.

In this mode the following elements are displayed:

- **Map toolbar** at the top.
- **Map orientation compass** in the upper right, visible only when the map is not oriented to the north.
- **Navigation toolbar** on the right (this bar is also present in the pages *Trip computer* and *Compass*).

Map toolbar

The map toolbar contains the following elements:

- **Icon** : to move the map in the current location (GPS must be turned on).
- ***Map menu*** : opens a dropdown menu containing the menu items.
- ***Selected map name***: tapping on the map name you can select a different one from an available map list (v. *Map choice*).
- **Coordinates** relative to the central red viewfinder.
- The **altitude** of the point indicated by the central red viewfinder (you must first download the elevation data with the function *Download DEM data* not available in the Lite version).

Map menu

Menu items are marked with:

- **Green empty dot** => off option.
- **Green solid dot** => active option.
- **Green line** => function.

The map menu contains the following elements grouped into several sections (written in yellow):

- **Mode**
  - **3D Map**: Draw the map in perspective (3D mode).
  - **Follow user mode**: Automatically move the map where the user is located and orients the map in the direction of travel.
  - **Distance mode**: Allows you to calculate the distance from the point of activation to the central red viewfinder; the distance is shown in a special box.

- **Find**
  - **Find waypoint**: Moves the map to the waypoint that has been chosen from a list.
  - **Find track**: Moves the map to the start of the track that has been chosen from a list.
  - **Find route**: Moves the map to the start of the route that has been chosen from a list.
  - **Find address**: Moves the map to the point corresponding to the entered address.
  - **Find coordinates**: Moves the map to the point corresponding to the entered coordinates; these can be entered in various formats according to the datum selected in *Settings* page.
  - **Search geocaches**: Find geocaches on the www.geocaching.com web site near the point indicated by the red viewfinder in the center of the map.

- **Zoom**
  - **Zoom to GPX data** (if available): Moves the map and sets the zoom to show all the GPX data contained in the device.
  - **Zoom to copied coordinates** (if available): Moves the map and sets the zoom at the point corresponding to the copied coordinates (v. *Copy coordinates* menu).

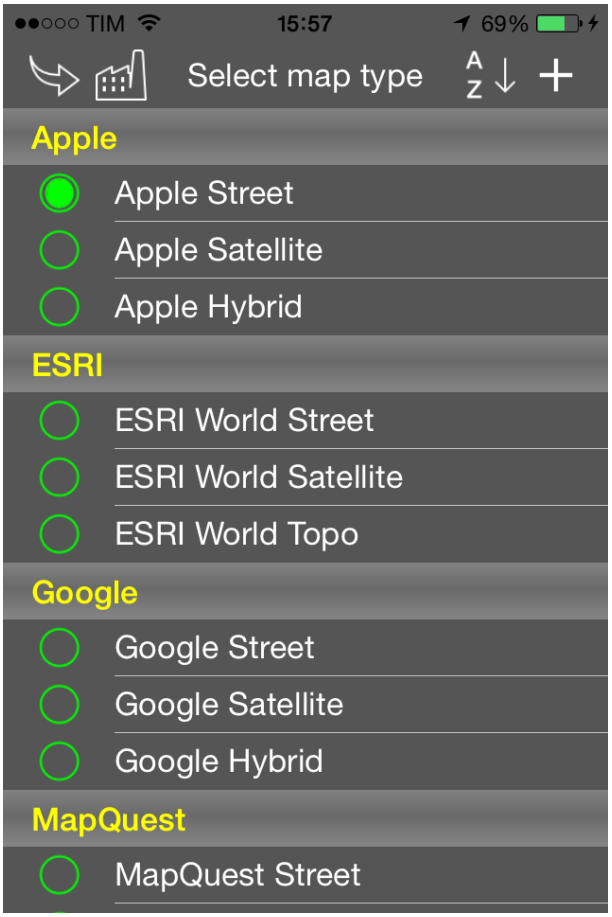
- **Viewfinder**
  - **Info coordinates**: Provides address information relative to the location indicated by the red viewfinder in the center of the map.
  - **Copy coordinates**: Stores the coordinates relative to the location indicated by the red viewfinder in the center of the map and keeps them for future use (paste); the point relative to the copied coordinates is highlighted on the map with a pin red.
  - **Reset copied coordinates** (if available): Reset the coordinates copied the last time.
  - **Navigate with Apple Maps**: Opens the Apple Maps navigation function on the path created from the user current location to the point indicated by the red viewfinder in the center of the map.
  - **Download DEM data** (not available in the Lite version): Downloads the STRM elevation data related to the point indicated by the red viewfinder in the center of the map. Please see the paragraph *STRM elevation data*.

- **Create**
  - **Create waypoint at viewfinder**: Creates a waypoint in the current.gpx file (if it doesn't exist it will be created) for the point indicated by the red viewfinder in the center of the map; a box is opened to specify the name and description of the waypoint.
  - **Create new track**: Create a new track on the map; it opens a box to specify the name and description of the track, then opens a toolbar on the left contains six buttons to add, remove and move the points of the track; these buttons affect the closest point to the location indicated by the red viewfinder in the center of the map; a seventh button (x) closes the current function.
  - **Modify track**: Modifies an existing track on the map; It opens the list of tracks to choose the track to change, then opens a toolbar equal to that seen in the function *Create new track*; the operations are similar.
  - **New track from here**: Creates a track in the current.gpx file that starts from the user current location and ends in the point indicated by the red viewfinder in the center of the map. A page containing all the possible paths is opened. The user can decide whether to walk or drive and view the list of turns along the way.

    The track is saved by tapping the icon .
  - **New track from copied coord.**: Creates a track in the current.gpx file that starts from the last copied coordinates and ends in the point indicated by the red viewfinder in the center of the map.
  - **Create new route**: Similar to the previous function *Create new track*.
  - **Modify route**: Similar to the previous function *Modify track*.

- **Show**
  - **Show indicators**: Shows or not the box at the top containing the navigation indicators
  - **Show custom maps**: Shows or not the *Custom maps*.
  - **Show waypoints**: Shows or not the waypoints on the map.
  - **Show tracks**: Shows or not the tracks on the map.
  - **Show routes**: Shows or not the routes on the map.

Map choice



The map shown in the map toolbar at the top can be changed according to the needs of the moment.

To change the selected map it is enough to tap on the name of the map.

The page shown here to the left appears; it contains the list of all available maps.

The map marked by a green solid dot is the currently selected one. To choose a different one it is enough to tap on the appropriate line.

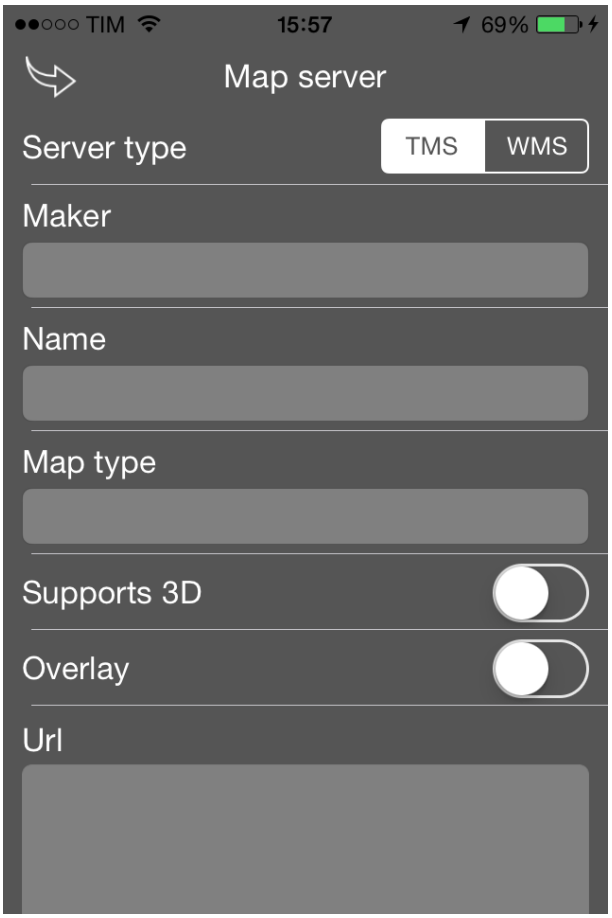
The list of the maps can be sorted by tapping on the icon ; possible sorts are by:

- Manufacturer.
- Type.

The yellow grouping sections change accordingly.

To cancel the selection of a new map, tap on the icon .

Add a new map



To add a new map tap on the icon .

A new page is opened, shown at left, where you can enter the characteristics of the *map server* that provides the service.

Must be specified:

- The map server type: TMS or WMS.
- The map provider.
- The map name.
- Thew map type (street, topographic, hybrid, etc..).
- If supports 3D visualization.
- If it is an additional overlay, i.e. if the underlying default vector map should however be drawn.
- The URL of the server (eg: "http://tile.openstreetmap.org/{z}/{x}/{y}.png").
- The description of the license to display on the map.

To restore the factory settings, press the icon ; **attention** because the new server entered will be deleted.

Navigation tools

The navigation toolbar contains the following elements:

- **Start** : To start the recording of a new track or resume from a pause in recording the current track. The track is drawn on the map, responding dynamically to any user movement. It is stored in the current.gpx file (if it doesn't exist it will be created).
- **Pause** : To pause the recording of the current track, for example when making a prolonged stay.
- **Stop** : To stop the recording of the current track. If at least one point has been registered, a box is opened to specify the name and description of the new track.
- **New waypoint** : To register a new waypoint at the current position. A box is opened to specify the name and description of the waypoint. The waypoint is stored in the current.gpx file (if it doesn't exist it will be created).
- **New waypoint with photo** : Same functionality as above but with the ability to take a picture of the surrounding landscape that will be associated with the waypoint you are recording. A copy of the picture can be recorded in the photos album if required in the *Settings* page. In this page you can also specify the image resolution (high, medium or low); naturally better resolution will require more storage for the same photo.
- ***Navigation menu*** : opens a dropdown menu containing the menu items.

Navigation menu

Menu items are marked with:

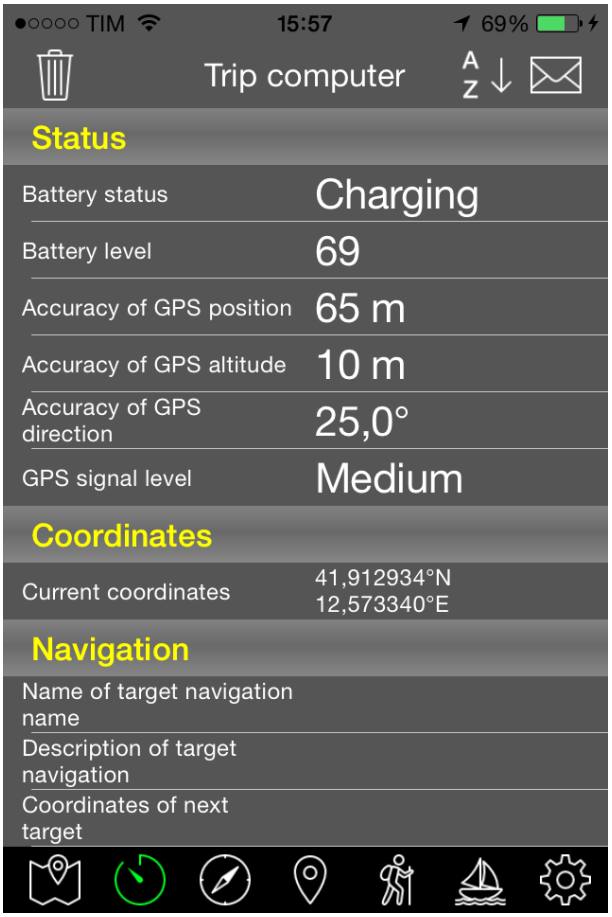
- **Green empty dot** => off option.
- **Green solid dot** => active option.
- **Green line** => function.

The map menu contains the following elements grouped into several sections (written in yellow):

- **Navigation**
  - **GPS active**: Turn on / off the GPS. When the GPS is not needed, turning it off is gives a significant increase in battery life. Of course when the GPS is turned off some functions will be disabled.
  - **Go to waypoint**: This function helps you to navigate to a waypoint. The waypoint is selected on a page containing the list of waypoints contained in all GPX files on your device. In this mode, some additional navigation indicators are calculated (v. *Trip computer*) and on the *Compass* page is turned on the indicator (green) of the direction to follow to reach the waypoint is turned on.
  - **Follow a track**: Similarly this helps you to navigate along a track.
  - **Follow a route**: Similarly this helps you to navigate along a route.
  - **Waypoint proximity**: Allows you to choose a waypoint near which you will hear a voice message or a beep. The distance can be customized in the *Settings* page.
  - **Anchor alarm**: Sets the point where the anchor was thrown. If the boat moves you will hear a voice message or a beep. The distance can be customized in the *Settings* page.

- **Utility**
  - **GPX files management**: Opens a page containing the list of GPX files loaded into the device. For each file the number of waypoints, tracks and routes it contains is displayed. Swiping your finger on the relevant line from right to left appears a menu that allows you to delete, hide / show and send to iCloud drive or by email the file. Files can be downloaded from iCloud drive with the icon . Hidden files are highlighted in red. The menu is not available for the particular file *current.gpx*.
  - **Custom maps management** (not available in the Lite version): Opens a page containing the list of the KMZ files loaded into the device (custom maps). For each file the number of tiles is displayed as well as, the format (jpg, tif, etc..) and the draw order (specified during the production of the KMZ file itself). Swiping your finger on the relevant line from right to left appears a menu that allows you to delete, hide / show and send to iCloud drive or by email the file. Files can be downloaded from iCloud drive with the icon . Hidden files are highlighted in red.
  - **Archive current GPX**: Rename the current.gpx file with a new name and create a new empty current.gpx file. This function is active only when the track recording is stopped and the GPX file contains at least one element (waypoint, track or route).
  - **Send my position**: Automatically creates an email containing the coordinates of the current position, the corresponding datum (specified in the *Settings* page) and the date / time of detection of the position.
  - **Send current GPX**: Send by email the current.gpx file as an attachment. This function is active only when the track recording is stopped and the GPX file contains at least one element (waypoint, track or route).

Trip computer



The *Trip computer* page contains a list of all the status and navigation indicators available.

The list of indicators can be sorted by tapping on the icon ; possible sorts are by:

- Unit of measure.
- Type.

The yellow grouping sections change accordingly.

Tapping the icon creates an automatic email with all current indicators.

The icon resets all progressive indicators such as distance traveled, difference uphill, etc..

Like the *Map* page, by tapping on the green icon of the *Trip computer* below (or tapping for a split second on the page itself) you get the navigation toolbar displayed. Repeating the operation returns you to the previous mode. The features have been outlined on the *Map* page.

Status and navigation indicators

Below are listed all the indicators available on this page when sorted by Unit of measure:

- **Status**
  - Battery status (Unknown, Charging, Full, Unplugged).
  - Battery level.
  - Accuracy of GPS position.
  - Accuracy of GPS altitude.
  - Accuracy of GPS direction.
  - GPS signal level (Off, None, Poor, Medium, Full).
- **Coordinates**
  - Current coordinates.
- **Navigation**
  - Name of target navigation.
  - Description of target navigation.
  - Coordinates of next target.
  - Coordinates of end target.
- **Directions**
  - Direction of magnetic north.
  - Direction of true north.
  - Magnetic variation.
  - Direction of next target.
  - Direction of end target.

- **Distances**
  - Distance traveled.
  - Distance traveled flat.
  - Distance traveled uphill.
  - Distance traveled downhill.
  - Distance to next target.
  - Distance to end target.

- **Times**
  - Total travel time.
  - Time in stop.
  - Time in motion.
  - Time traveled flat.
  - Time traveled uphill.
  - Time traveled downhill.
  - E.T.E. next target.
  - E.T.E. end target.

- **Altitudes and differences**
  - Departure altitude.
  - Current altitude.
  - Minimum altitude.
  - Maximum altitude.
  - Difference uphill.
  - Difference downhill.

- **Times en route**
  - Departure time.
  - Time of last GPS point.
  - Time of sunrise.
  - Time of sunset.
  - E.T.A. next target.
  - E.T.A. end target.

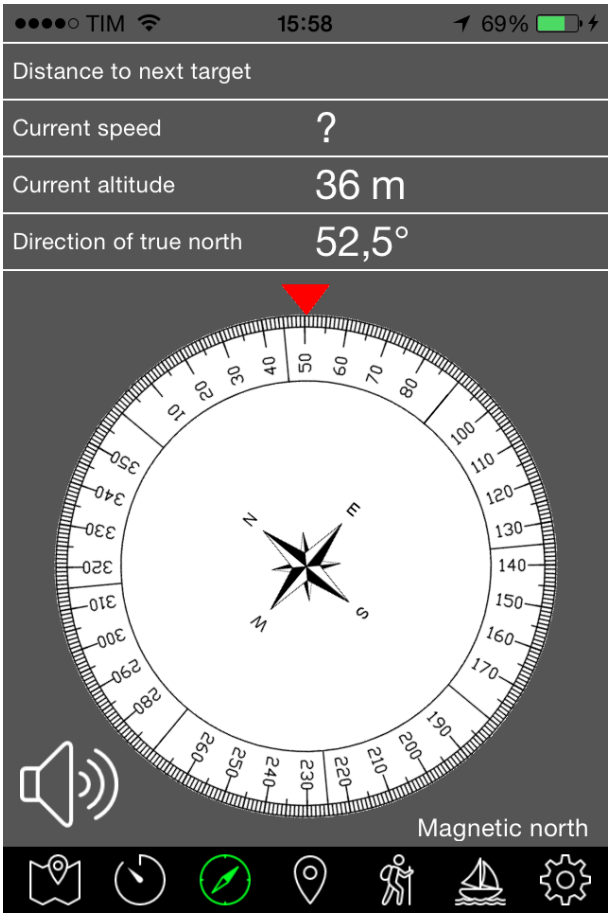
- **Speeds**
  - Current speed.
  - Minimum speed.
  - Maximum speed.
  - Average speed.
  - Average speed in motion.
  - Average speed flat.
  - Average speed uphill.
  - Average speed downhill.

- **Rates**
  - Rate of uphill.
  - Rate of downhill.

- **Slope in percentual**
  - Average slope uphill %.
  - Average slope downhill %.

- **Slope in degrees**
  - Average slope uphill °.
  - Average slope downhill °.

Compass



This page contains a rotating compass indicating the direction of true or magnetic north. True or magnetic north chioce can be defined in the *Settings* page. A label at the bottom of the page indicates the type of the north.

The reading is facilitated by a red triangular shape indicator on the top of the rotatable compass.

When you are using the functions *Go to waypoint*, *Follow track* or *Follow route*, the direction to follow is indicated by a second green triangle flowing around the crown of the compass.

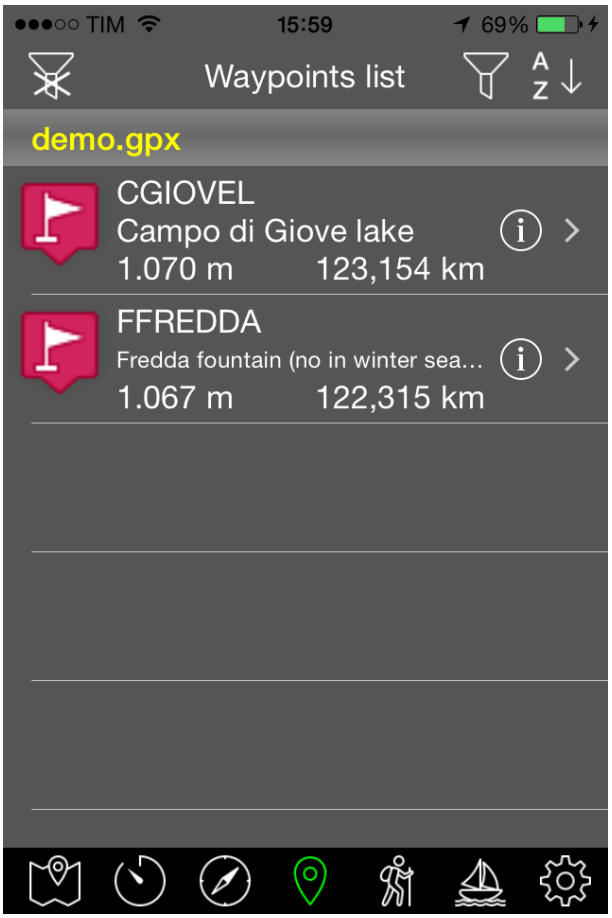
Tapping the icon makes the voice synthesizer speak the direction in degrees shown by the compass. This feature may be very useful if you're pointing the device towards a goal and you cannot read the contents of the screen.

Four status / navigation indicators are displayed at the top of the page. They can be customized as explained in the *Map* page.

Like the *Map* page, by tapping on the green icon of the *Compass* below (or tapping for a split second on the page itself) you get navigation toolbar displayed. Repeating the operation returns you to the previous mode. These features have been outlined on the *Map* page.

Waypoints

Waypoints list



This page displays a list of waypoints contained in all GPX files on your device.

Each element contains:

- Waypoint icon or thumbnail of the photo associated (on this you can tap to get an enlargement).
- Waypoint name.
- Waypoint description / comment.
- Altitude.
- Distance from current position.

The list of waypoints can be sorted tapping on the icon ; possible sorts are by:

- File name.
- Name.
- Description.
- Comment.
- Type.
- Distance.
- Altitude.

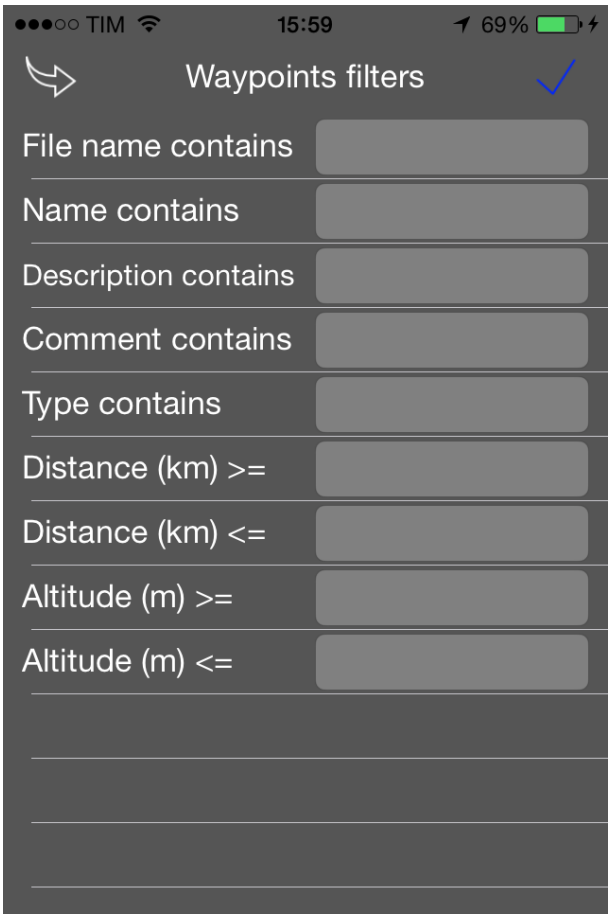
The yellow grouping sections change accordingly.

The waypoints list can be filtered by tapping the icon ; The page *Waypoint filters* appears. To clear all the filters it is enough to tap on the icon .

Each waypoint can be deleted by swiping your finger on the relevant line from right to left and then pressing the red button *Delete*.

Tapping on the icon , contained in each element of the waypoints list, opens the *Waypoint form* page.

Waypoint filters



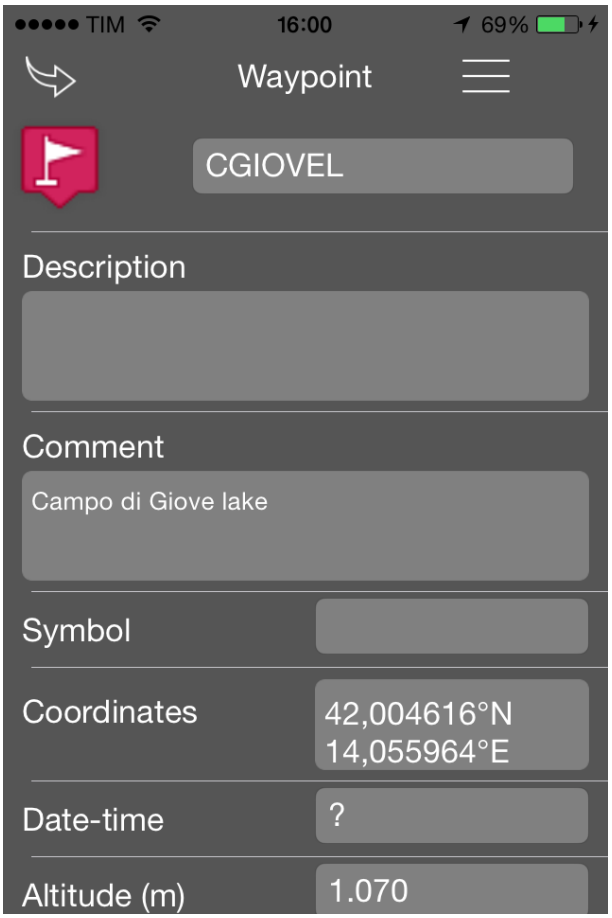
The waypoints list can be filtered by tapping the icon . You will see the page shown on the left.

Possible filters are:

- File name (contains).
- Name (contains).
- Description (contains).
- Comment (contains).
- Type (contains).
- Distance (range).
- Altitude (range).

To confirm the filters you need to tap on the icon , while the icon cancels the operation.

Waypoint form



This page contains the details of a waypoint. The information displayed on this page can be changed by the user.

The icon returns to the *Waypoints list*.

The information displayed is:

- Icon that represents the waypoint or the thumbnail of the associated photo.
- Waypoint name.
- Waypoint description.
- Waypoint comment.
- Symbol.
- Coordinates (in reference datum).
- Date-time.
- Altitude.
- Distance from the current position.
- Direction from the current position.

Tapping on the icon opens a dropdown menu containing the menu items.

Menu items are marked with:

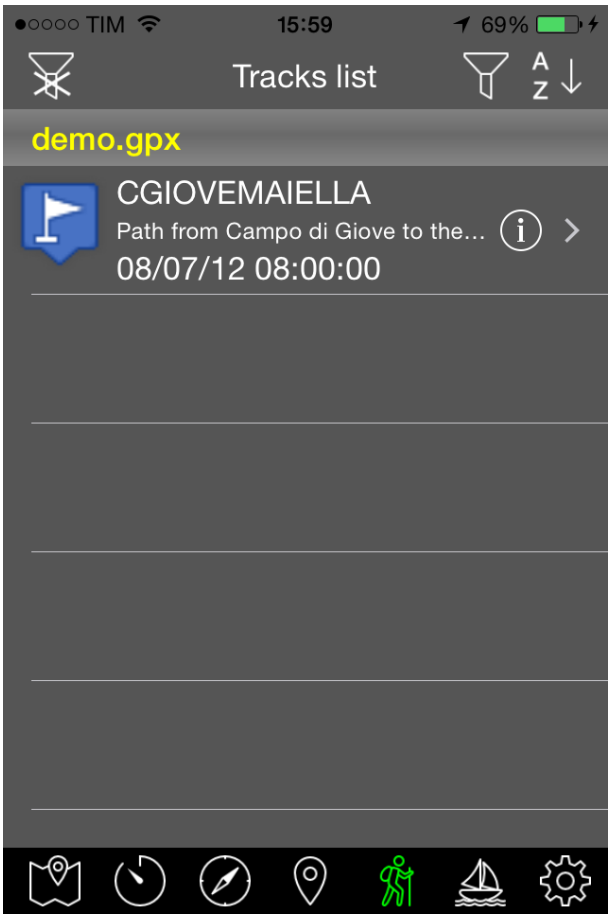
- **Green empty dot** => off option.
- **Green solid dot** => active option.
- **Green line** => function.

The functions are:

- **Delete**: Deletes the current waypoint and returns to the previous page.
- **Show on map**: Stores the current waypoint to display it the next time you open the *Map* page.
- **Go to waypoint**: Sets navigation to reach the current waypoint. In this mode, some additional navigation indicators are calculated (see *Trip computer*) and in the *Compass* page the green indicator of the direction to be taken to reach the waypoint is turned on.
- **Waypoint proximity**: Sets the current waypoint as a proximity point; when you approach the waypoint you will hear a voice message or a beep. The distance can be customized in the *Settings* page.
- **Navigate with Apple Maps**: Opens the navigation function of Apple Maps on the path created from the user's current location to the location indicated by the current waypoint.
- **Search geocaches**: Find geocaches on the www.geocaching.com web site near the location indicated by the current waypoint.

Tracks

Tracks list



This page displays a list of tracks contained in all GPX files on your device.

Each element contains:

- Icon that represents the track.
- Track name.
- Track description / comment.
- Date-time of beginning.

The list of tracks can be sorted tapping on the icon ; possible sorts are by:

- File name.
- Name.
- Description.
- Comment.

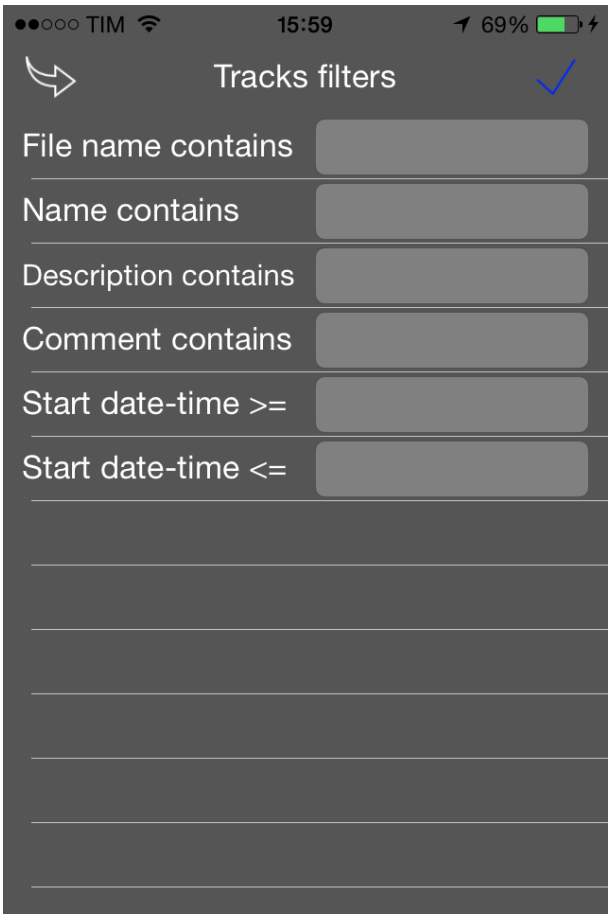
The yellow grouping sections change accordingly.

The tracks list can be filtered tapping the icon ; The page *Track filters* appears. To clear all the filters it is enough to tap on the icon .

Each track can be deleted by swiping your finger on the relevant line from right to left and then pressing the red button *Delete*.

Tapping on the icon , contained in each element of the tracks list, opens the *Track form* page.

Track filters



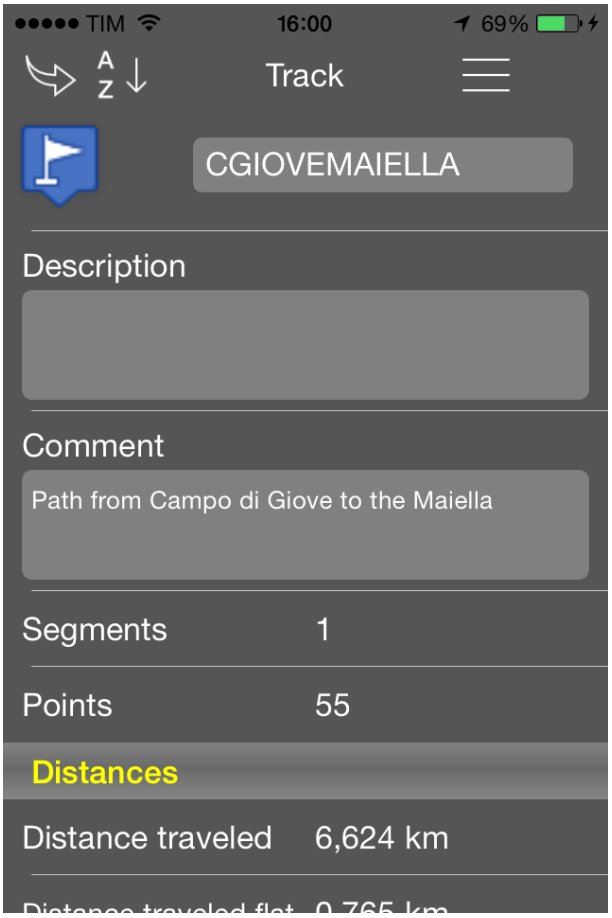
The tracks list can be filtered by tapping the icon . You will see the page shown on the left.

Possible filters are:

- File name (contains).
- Name (contains).
- Description (contains).
- Comment (contains).
- Date-time of beginning (range).

To confirm the filters you need to tap on the icon , while the icon cancels the operation.

Track form



This page contains the details of a track. The information displayed on this page can be changed by the user.

The icon returns to the *Tracks list*.

The information displayed is:

- Icon that represents the track.
- Track name.
- Track description.
- Track comment.
- Number of segments.
- Number of points.
- Statistical indicators.

Tapping on the icon opens a dropdown menu containing the menu items.

Menu items are marked with:

- **Green empty dot** => off option.
- **Green solid dot** => active option.
- **Green line** => function.

The functions are:

- **Delete**: Deletes the current track and returns to the previous page.
- **Set DEM altitude** (not available in the Lite version): Sets the altitude of all points of the track based on the downloaded STRM elevation data.
- **Travel time calculation** (not available in the Lite version): Set date-time to all points of the track considering the gradients and the average speed customizable in the *Settings* page. The departure time is prompted.
- **List points**: Opens the *Track points list* page.
- **Show graphics**: Opens the *Track graph* page.
- **Show on map**: Stores the current track to display it the next time you open the *Map* page.
- **Follow track**: Sets navigation to follow the current track. In this mode, some additional navigation indicators are calculated (see *Trip computer*) and on the *Compass* page the green indicator of the direction to be taken to follow the track is turned on.
- **Invert track**: Creates a new track, named "I." + name of the current track, containing the inverted list of segments and points. This feature is useful when you want to follow a track from the end and return to the start.

Track points list

This page displays a list of track points.

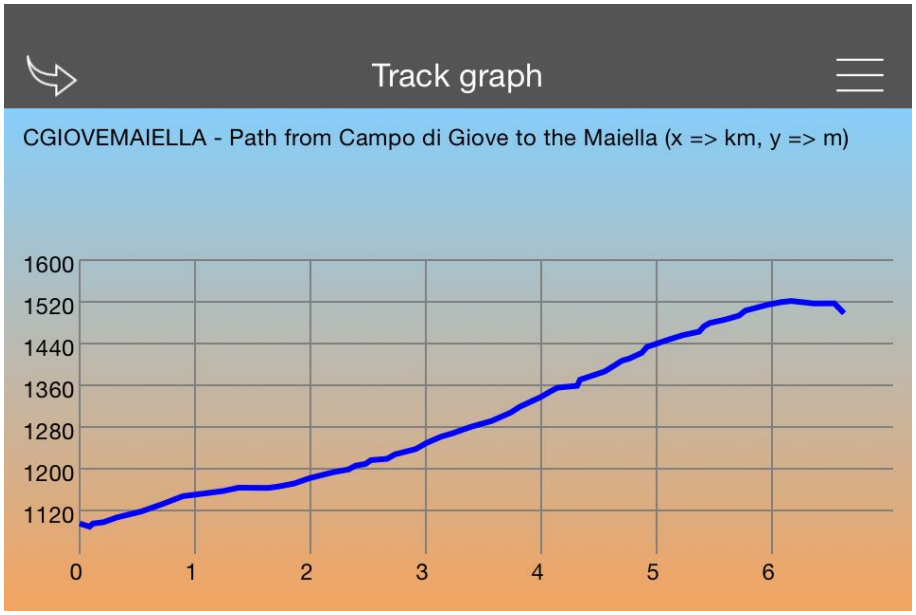
The yellow sections represent the segments of the track (points where the signal has been lost or track recording has been paused).

Each element contains:

- Sequence number of the point.
- Date-time of point detection.
- Altitude.
- Coordinates.

The icon returns to the *Track form*.

Track graph



This page displays the graph of a track.

Tapping on the icon opens a dropdown menu containing the types of graph and display modes.

Graph type (x/y):

- **Distance/ Altitude**
- **Time / Altitude**
- **Distance / Speed**
- **Time / Speed**
- **Time / Distance**

Show:

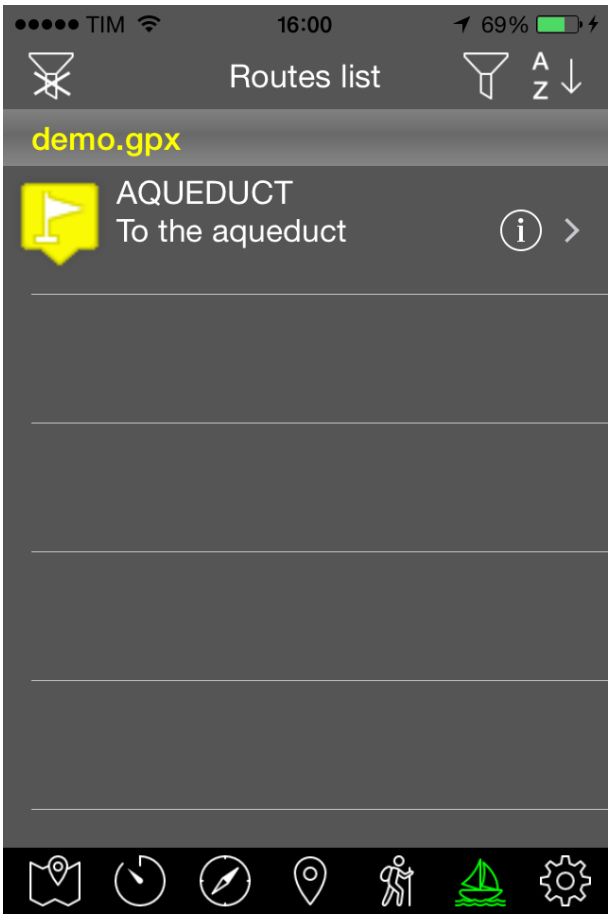
- **Show waypoints**: Show waypoints along the line of the graph
- **Show segments**: Show segments along the line of the graph
- **Show DEM data**: Show with a yellow line the elevation profile based on STRM data.
- **Apply smoothing**: Softens the graph line

You can zoom into a graph using the *Pinch* gesture (using thumb and index fingers).

The icon returns you to the *Track form*.

Routes

Routes list



This page displays a list of routes contained in all GPX files on your device.

Each element contains:

- An icon that represents the route.
- Route name.
- Route description / comment.

The list of routes can be sorted by tapping on the icon ; possible sorts are by:

- File name.
- Name.
- Description.
- Comment.

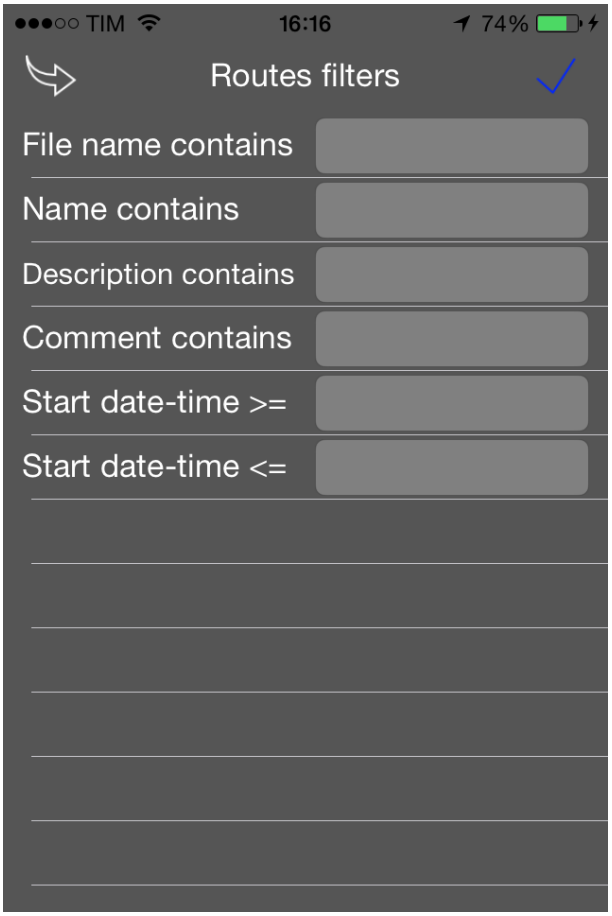
The yellow grouping sections change accordingly.

The routes list can be filtered by tapping the icon ; The *Route filters* page appears. To clear all the filters it is enough to tap on the icon .

Each route can be deleted by swiping your finger on the relevant line from right to left and then pressing the red button *Delete*.

Tapping on the icon , contained in each element of the routes list, opens the *Route form* page.

Route filters



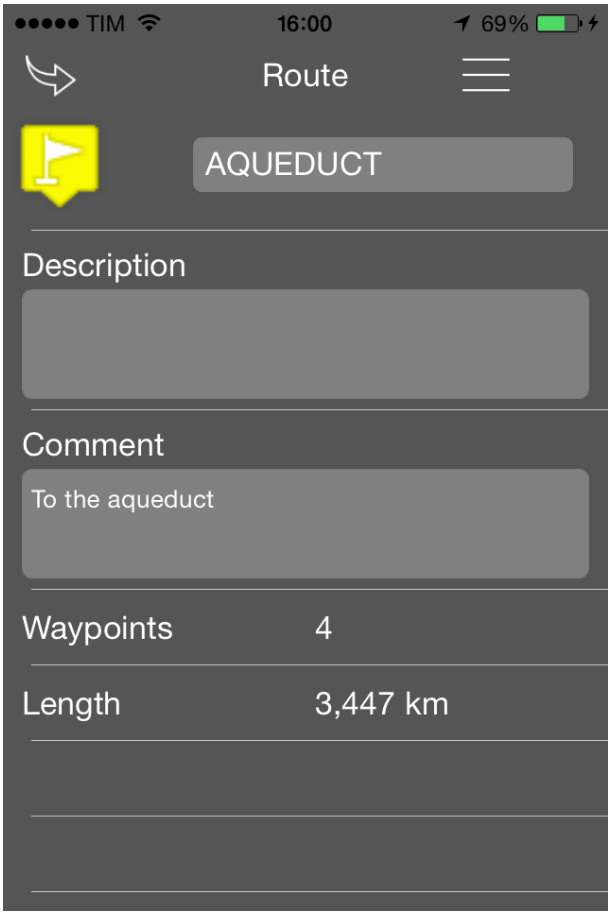
The routes list can be filtered by tapping the icon . You will see the page shown on the left.

Possible filters are:

- File name (contains).
- Name (contains).
- Description (contains).
- Comment (contains).
- Date-time of beginning (range).

To confirm the filters you need to tap on the icon , while the icon cancels the operation.

Route form



This page contains the details of a route. The information displayed on this page can be changed by the user.

The icon returns to the *Routes list*.

The information displayed are:

- An icon that represents the route.
- Route name.
- Route description.
- Route comment.
- Number of waypoints.
- Route length

Tapping on the icon opens a dropdown menu containing the menu items.

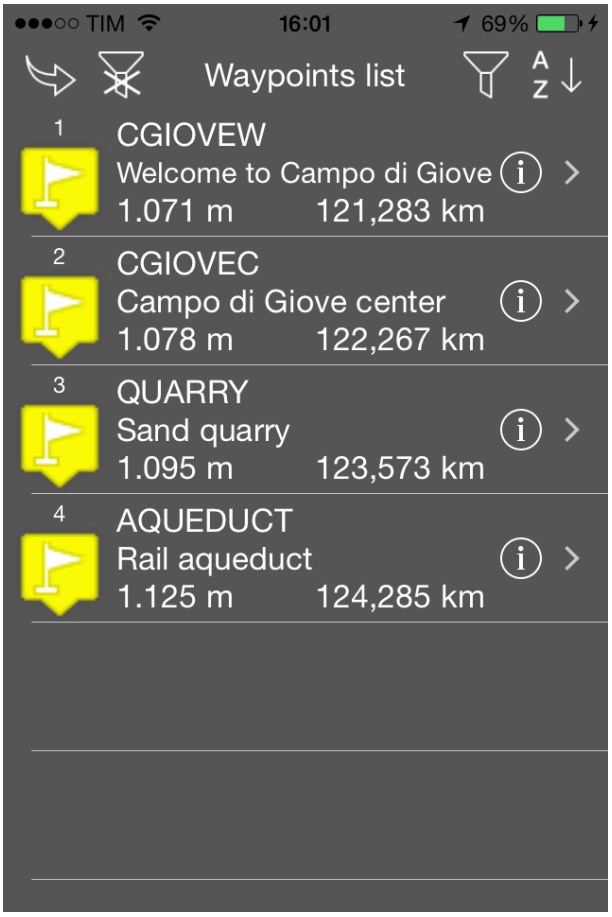
Menu items are marked with:

- **Green empty dot** => off option.
- **Green solid dot** => active option.
- **Green line** => function.

The functions are:

- **Delete**: Deletes the current route and returns to the previous page.
- **List waypoints**: Opens the *Route waypoints list* page.
- **Show on map**: Stores the current route to display it the next time you open the *Map* page.
- **Follow route**: Sets navigation to follow the current route. In this mode, some additional navigation indicators are calculated (see *Trip computer*) and on the *Compass* page the green indicator of the direction (green) to be taken to follow the route is turned on.
- **Invert route**: Creates a new route, named "I." + name of the current route, containing the inverted list of waypoints. This feature is useful when you want to follow a route from the end and return to the start.

Route waypoints list



This page displays a list of waypoints of a route.

Each element contains:

- Sequence number.
- An icon that represents the route waypoint.
- Waypoint name.
- Waypoint description / comment.
- Altitude.
- Distance from current position.

The list of waypoints can be sorted by tapping on the icon ; possible sorts are by:

- Waypoint sequence.
- Name.
- Description.
- Comment.
- Type.
- Distance.
- Altitude.

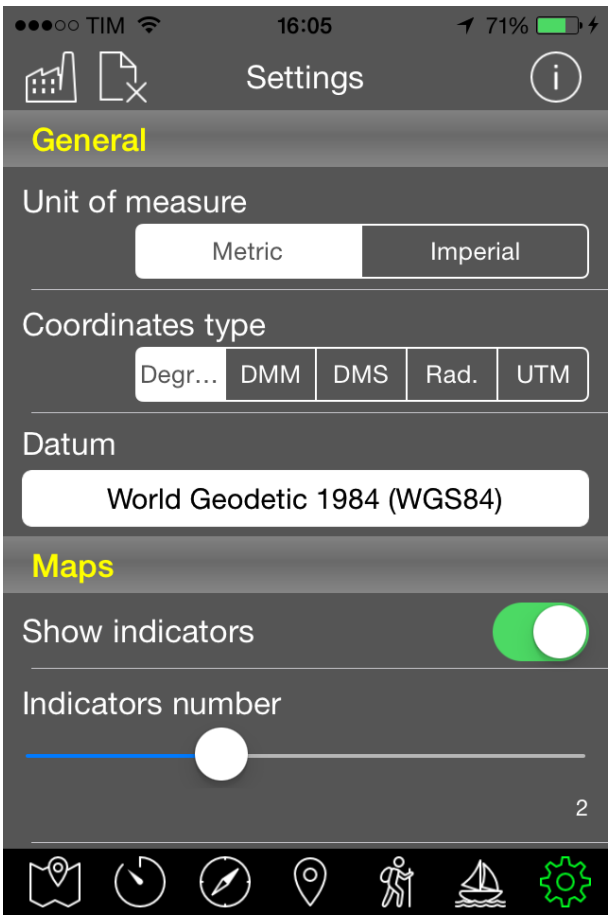
The yellow grouping sections change accordingly.

The waypoints list can be filtered by tapping the icon ; The page *Waypoint filters* page appears. To clear all the filters it is enough to tap on the icon .

Each waypoint can be deleted by swiping your finger on the relevant line from right to left and then pressing the red button *Delete*.

Tapping on the icon , contained in each element of the waypoints list, it opens the *Waypoint form* page.

Settings



This page is used to set preferences used by the app.
In particular on this page the following parameters can be customized:

- General
  - Measuring system (metric / imperial)
  - Coordinates type (Deg = degrees, DMM = degrees and minutes, DMS = degrees, minutes and seconds, Rad = Radiants, UTM)
  - Reference Datum
  - Compute DEM altitude (plane / bilinear)
  - Walking speed, flat
- Maps
  - Show indicators (on/off)
  - Indicators number (from 1 to 4)
  - Show custom maps (on/off)
  - Custom map transparency for PNG (from 0 = trasparent to 1 = opaque)
- Navigation
  - Distance filter for recording tracks (to record a new point at least the declared distance must have been traveled)
  - Time filter for recording tracks (to record a new point at least the declared time must have elapsed)
  - Increase accuracy during turning (recorded more points in direction changes)
  - Waypoint proximity distance
  - Anchor alarm distance
  - Send position data to OkMap server (on/off)
  - OkMap server - My Id
  - OkMap server - Host
  - OkMap server - Port
  - OkMap server - Track line thickness
  - OkMap server - Track line color
- Compass
  - North type (true or magnetic)
  - Automatic compass calibration (on/off)
- GPX
  - Show waypoints on map (on/off)
  - Show tracks on map (on/off)
  - Show routes on map (on/off)
  - Track line thickness
  - Track line color
  - Route line thickness
  - Route line color
  - Photos resolution (low, medium, high)
  - Save photos in album also (on/off)

- Notifications
  - Low battery level (on/off)
  - Poor or no GPS signal (on/off)
  - Reached proximity waypoint (on/off)
  - Anchor alarm (on/off)
  - Use speech synthesizer or acoustic signal

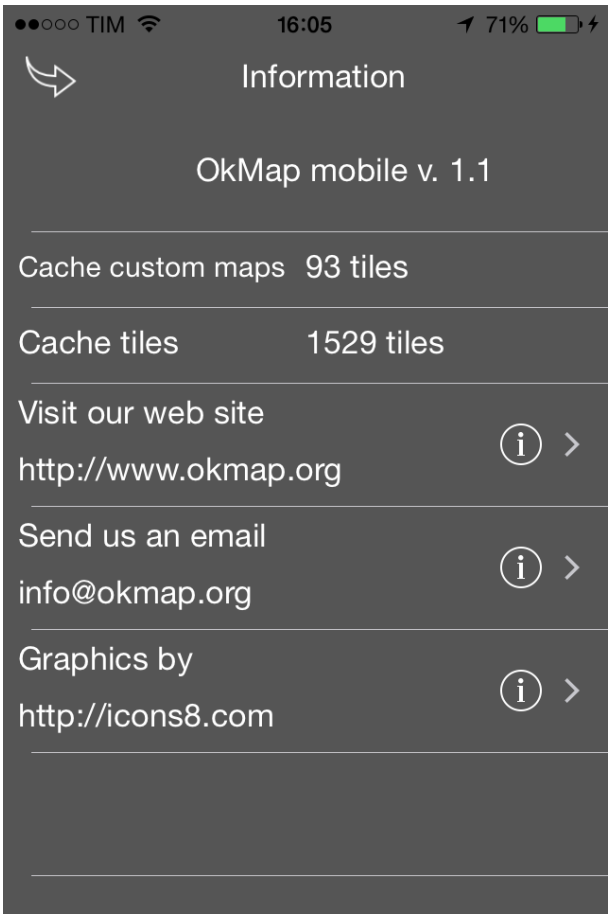
- Screen on
  - While recording the track (on/off)
  - While navigating to a destination (on/off)
  - When the device is powered (on/off)
  - Always (on/off)

Tapping on the icon the factory settings will be restored.
This feature also acts on other preferences that aren't on this page, such as sort criteria in list functions, graph settings, etc...

Tapping on the icon the memory of the images of the maps downloaded from the net will be erased. This will increase the available memory of the device, but it will make slower (or impossible in the absence of a network connection) the rendering of the maps already displayed.

Tapping on the icon will display of the *Information* page.

Information



This page shows some utility information:
- Name and version of the app.
- The number of tiles in the cache of custom maps.
- The number of tiles in the cache of downloaded maps from servers.
- Links to useful sites.

Tapping the icon returns to the *Settings* page.

Appendix

Transferring files between a PC and the device with the cable

KMZ files and GPX can be easily installed on your iOS device using the following procedure:

1. Connect the iPhone with the cable to the PC.
2. Open iTunes; if not installed you can download it from http://www.apple.com/it/itunes/download.
3. Click on the icon containing a small iPhone in the toolbar at the top left.
4. Click on Settings - Apps on the left sidebar.
5. Scroll down to the *File Sharing* section.
6. Click the OkMap Mobile icon (or OkMap Mobile Lite).
7. Click on the *Add file…* button at the bottom right.
8. Select the KMZ or GPX file from the folder on your computer.

The reverse procedure (data transfer from the device to the PC) is identical until the step 6, then proceed with:

7. Select with the mouse one or more files to copy to your PC.
8. Click on the *Save as...* button at the bottom right.
9. Select the folder on your PC where to save the selected files.

Remember that the custom maps can only be used in the full paid version of OkMap Mobile.

Using iCloud drive

This procedure allows you to exchange GPX and KMZ files from / to your PC via Apple Cloud (iCloud drive) without needing cables and wherever you are.

The prerequisites to enable this procedure are:

- iOS 8 installed on your device
- PC running OS X Yosemite or Microsoft Windows 7 or higher with iCloud Drive installed (for more information, visit https://www.apple.com/it/support/icloud/icloud-drive/).

Once you have copied your files GPX and KMZ in the cloud you can download them to your mobile device (v. *Navigation menu* GPX file management and Custom maps management functions).

Similarly it is possible to reverse the procedure, ie copy files from your mobile device on the cloud. The files in the cloud will be replicated automatically to a folder on your PC.

Importing ZIP, GPX and KMZ files

OkMap automatically recognizes ZIP, GPX and KMZ files received via email or downloaded from the Internet enabling the automatic import function to install files in your data set.

ZIP files are unpacked and scanned for GPX and KMZ files to be imported automatically.

To activate the procedure tap on the *Open in*... caption (download) or make a long tap on the file icon (eMail); then select the OkMap Mobile icon.

Sending data to the Windows OkMap Desktop server

OkMap Mobile is equipped with a function to send continuously and in real time our location to a remote server on which OkMap Desktop for Windows (freeware) is installed.

OkMap Desktop server can simultaneously receive positions from multiple mobile devices and can represent the movements of users as tracks on a vector or raster previously loaded map.

The server side operations are described in the OkMap Desktop user manual that can be downloaded at http://www.okmap.org/download/okmap_it.pdf.
The software OkMap Desktop for Windows is freely downloadable at http://www.okmap.org/it_download.asp.

To activate the function in OkMap Mobile app simply follow these steps:

1. Open the *Settings* page by tapping the icon .
2. Go to the *Navigation* section.
3. Set the field *Server OkMap - My Id* with a text that identifies user (eg: Nickname, Id, Last name, etc...).
4. Set the field *Server OkMap – Host* with the IP address of the Windows server where OkMap Desktop software is installed and activated.
5. Set the field *Server OkMap – Port* with the number of the communication port selected in the OkMap Desktop software (default = 5150).
6. If necessary, set the thickness and the color used to represent the track in the OkMap Desktop software.
7. Start / stop sending data using the switch *Send position data to OkMap server*.